Adjustment of Capital Consumption, Profits, and Corporate Taxes in the National Income Accounts for Effect of Treasury Asset Depreciation Range (ADR) System

ON June 22 the Treasury Department announced the adoption of regulations placing into effect the liberalized asset depreciation range (ADR) system of depreciation for machinery, equipment, and certain other property. The regulations are effective retroactively to the beginning of 1971. To take account of these regulations, adjustments have been made in the estimates of capital consumption, corporate profits, proprietors' income, corporate income taxes, and related measures beginning with the first quarter of 1971. Taxes on unincorporated businesses (proprietorships and partnerships) are recorded in the national income accounts on a cash payments basis rather than on a liabilities basis. Therefore, the ADR liberalization has not yet affected such taxes as recorded in the accounts.

The main provisions of ADR permit a 20 percent modification of service lives from the existing guideline lives and an optional change in the convention used to determine depreciation during the year in which the asset is placed in service. Existing regulations allow 50 percent of the full year's depreciation to be taken in the first year. Under ADR approximately 75 percent will be allowed.

Table 1.—Estimated Effect of ADR System on Depreciation and Profits, 1971

[Million dollars, annual rate]

Year and quarter	All industries	Farm	Mfg.	All other
	Corporate			
Estimated adoption rate (percent)		65	85	75
I	3,506	17	1,498	1,991
II	3,764	19	1,606	2,139
III	4,011	21	1,714	2,276
IV	4,239	23	1,818	2,398
Total	3,880	20	1,659	2,201
	Noncorporate			
Estimated adoption rate (percent)			50	80
I	400	(1)	28	372
II	430	(1)	29	401
III	458	(1)	32	426
IV	484	(1)	35	449
Total	443	(1)	31	412

1. Not applicable.

An estimate of 1971 investment was the first step in the calculation of the additional depreciation attributable to ADR. This was done by projecting small increases in investment in producers' durable equipment in the third and fourth quarters and adding an allowance for certain types of assets which are classified as structures in the national income accounts but are considered as machinery and equipment for tax purposes.

This yielded an investment figure of $76 billion for 1971 (a figure calculated by the Treasury Department in their work on the subject and adopted by OBE after review of the procedure). Second, Treasury assigned service lives to various types of equipment based upon an OBE study of corporate depreciation.[1] These lives and lives 20 percent shorter were used by Treasury to estimate the additional depreciation resulting from the liberalization (including the amounts resulting from the liberalized first year rules).

OBE made adjustments to the Treasury estimates. First, OBE excluded estimates of noncorporate farm depreciation. The figures on farm depreciation, both corporate and noncorporate, used in the national income accounts are estimated by the Agriculture Department independently of Internal Revenue Service data. However, corporate farm depreciation was not excluded from these estimates because it is needed in calculating one impact of ADR on total corporate profits and corporate tax liability.

1. Allan H. Young, "Alternative Estimates of Corporate Depreciation and Profits: Part I," *Survey of Current Business*, April 1968. See table on page 20.

Table 2.—Estimated Effect of ADR System on Federal Corporate Income Tax Liabilities, 1971

[Million dollars, annual rate]

Year and quarter	All industries
I	1,578
II	1,694
III	1,805
IV	1,908
Total	1,746

NOTE.—45% marginal rate applied to reduction in profits shown in table 1.

Second, the estimate of depreciation was allocated between corporate and noncorporate business largely on the basis of historical depreciation data in the national accounts. The corporate percentages used were: manufacturing, 97 percent; farm, 7 percent; and other, 80 percent. Quarterly estimates were derived by the use of a smooth curve.

Third, OBE made an independent estimate of the extent to which the ADR would be adopted. Previous depreciation liberalization, such as the 1954 introduction of double declining-balance and sum-of-the years digits and the 1962 guidelines, were not taken by a substantial segment of business. However, there are several factors which will probably make the adoption rates higher this time. One important factor is the abolition of the reserve ratio test instituted in 1962. Another is that many businesses that did not adopt the 1962 guidelines because they were already using equipment lives as short as those allowed, will find it advantageous to adopt the new liberalizations. After consultations, both outside and inside the Government, the following assumptions were made about the percentages of adoption of ADR for 1971.[2]

	Corporate	Noncorporate
Manufacturing	35	60
Farm	65	(1)
Other	75	60

1. Not applicable.

Table 1 shows the estimated additional depreciation in 1971, for corporate and noncorporate business. Depreciation for the first and second quarters has been increased by $3,889 million and $4,175 million, respectively, the sum of nonfarm corporate and noncorporate depreciation. Corporate farm depreciation appears in table 1 because it is needed in adjusting corporate profits and corporate tax liability.

The adjustment of corporate tax liabilities is shown in table 2. Research by OBE confirmed that the 45 percent marginal tax rate suggested by Treasury[3] was appropriate. It was also necessary to consider the impact of the ADR system on State corporate taxes. Tax officials in States accounting for most of the corporate tax liability were consulted. On the basis of the information obtained, it was estimated that loss of revenue to State governments would amount to somewhat less than $150 million for 1971.

2. These assumptions do not reflect any impact that restoration of an investment tax credit, proposed by the President on August 15, might have on decisions about adopting the ADR system.

3. "Tax Depreciation Policy Option: Measures of Effectiveness and Estimated Revenue Losses," *Congressional Record*, July 23, 1970, E6963-76.

Income

(*Continued from page 28*)

The coefficients of variation of the regional and State changes in total personal income and selected components, shown in table A, highlight the importance of income from the commodity-producing industries in explaining regional and State differences in total income change. While the regional coefficient of variation for total personal income was 0.19, it was 1.48 for income from commodity-producing industries but only 0.05 for the aggregate of all other income components. The State data show a similar pattern.

The relatively large variation among the regions and States in the rate of change in income from commodity production can also be seen from the table. While the rate of gain in total personal income among the States varied by 14 percentage points, changes in income from commodity production varied by 44 percentage points but the changes in in the total of other income varied only only 5½ percentage points.

Areas of slow growth

The 3 regions with the smallest gains in total personal income last year were the Great Lakes, Plains, and Far West. In all three, income from commodity-producing industries declined. In the Great Lakes and Far West, the weakness of income from commodity production primarily reflected developments in manufacturing; in the Plains it reflected a large drop in farm income.

In the Nation as a whole, manufacturing payrolls were about unchanged from 1969 to 1970, but in the Great Lakes region they fell 1½ percent, and in the Far West 2½ percent. The decline in the Great Lakes reflected the general weakness of durable goods manufacturing and in particular the sharp drop in auto industry payrolls during the strike in the fourth quarter. The decline in the Far West reflected the continued shrinkage of aerospace payrolls.

Farm income in the Plains declined more than 10 percent last year, compared to a nationwide decline of a little more than 5 percent. The flow of cash receipts from agriculture in the Plains was generally well maintained despite a decline in farm production, as inventories accumulated in previous years were drawn down.

Total personal income grew 5¼ percent or less in 8 States. A large decline in farm income played a key role in 4 States: South Dakota (total income up 5¼ percent), Iowa (5 percent), Nebraska (4¾ percent), and North Dakota, the only State to show a decline (down 1 percent). In each of the other four slow-growth States, manufacturing payrolls were off and construction was very weak; these include Ohio (total income up 5¼ percent), Washington (4 percent), Indiana (3½ percent), and Michigan (3 percent). Unusually large gains in transfer payments, centering in unemployment compensation, offset some of the weakness in payrolls in Michigan and Washington.

Areas of fast growth

The two regions with the largest gains in total personal income in 1970 were the Rocky Mountains (nearly 10 percent) and the Southwest (9 percent). Large increases in farm income, reflecting higher prices and increased marketings of cattle and calves, played a key role in both regions. Both also had above-average gains in manufacturing and construction payrolls. As a result of these sizable increases in commodity-producing industries, there were large increases in nearly all of the major industries that primarily meet local demand. Above-average gains were recorded in wages and salaries from wholesale and retail trade, the finance, insurance and real estate group, the transportation, communications, and public utilities group, and services, and also in nonfarm proprietors' income.

There were large personal income gains, ranging from 10 to 13 percent, in 7 States last year. While the causes of the increases in these States are more heterogeneous than in the case of States with small gains, some generalizations can be made. All seven States had above-average increases in income from commodity-producing industries. Manufacturing and construction payrolls showed above-average growth in all seven States. In 3 of the States (Arizona, Colorado, and West Virginia), there were also big increases in mining payrolls. In West Virginia, the growth of income from coal mining was particularly vigorous and was largely responsible for the strong rise in total income in the State. Tourism and retirement are important in four States of the group (Hawaii, Arizona, Florida, and Nevada) and income related to these activities expanded markedly in each of the four. There were also large increases in farm income in Colorado and in transfers in Alaska.